
Abstract

In facing the dynamic changes of the digital era, one of the goals of educational institutions is to produce high-quality graduates who can compete in the workforce. Tracer studies conducted by educational institutions aim to measure feedback from graduates and users of graduates. Telkom University conducts this Tracer study to obtain information regarding the performance of alumni, one of which is assessed by the level of alumni income. This research classified the income level based on 7 graduate competencies using Logistic Regression and Random Forest analysis methods optimized using AdaBoost. The modeling process uses 7 competency attributes and 1 attribute of Telkom University alumni income level. Based on the classification results using Logistic Regression and Random Forest models with AdaBoost optimization on Competency 1 to Competency 7, in the Logistic Regression model, the accuracy ranges from 13.39% to 24.52%, while the Random Forest model reaches a range of 8.14% to 36.02%. Although Random Forest performs better than Logistic Regression, both precision, recall, and F1-Score are still insufficient in both models. The practical benefit of this research can provide input to institutions on which competencies influence the income level of graduates.
